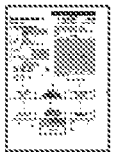
The Delphion Integrated View: INPADOC Record

Title: **TW0473655B: DETECTION SYSTEM FOR SUBSTRATE CLAMP**



High Resolution

Country: **TW** Taiwan
Kind: **B** Patent

Inventor: **WYKA, GARY**; United States of America
CARRERA, JAIME; United States of America
HOSKINS, VAN; United States of America

Assignee: **APPLIED MATERIALS, INC.** United States of America
News, Profiles, Stocks and More about this company

Published / Filed: **2002-01-21** / 2000-07-06

Application Number: **TW2000089113449**

IPC Code: Advanced: B25J 9/06; B25J 9/10; B25J 19/02; B65G 49/07; G05B 19/404; H01L 21/66; H01L 21/68;
Core: H01L 21/67; more...

ECLA Code: None

Priority Number: 1999-07-07 US1999000349001

Abstract: The present invention provides a method and apparatus for determining whether a substrate is in a clamped or unclamped state on a robot blade and preferably allows the position of a properly clamped substrate to be compensated for misalignments due to substrates not at or very near to their nominal positions on the blade. A sensor unit comprising a radiation source and a detector and capable of transmitting and receiving a signal is mounted outside a transfer chamber and is positioned to direct the signal therein. A robot blade having a reflecting member is actuated through the transfer chamber and into the path of the signal. The reflecting member is preferably positioned on a clamp finger and causes the signal to be reflected to the detector of the sensor unit when the signal is incident on the reflecting member. As the reflecting member moves through the signal the output of the sensor unit switches states, thereby generating values corresponding to the position of the reflecting member. Positional information may be derived from these values by comparison to predetermined, nominal positional information. The substrate is determined to be either unclamped, in which case the system is halted for operator intervention, or clamped. If the substrate is clamped, the derived positional information can be used to make adjustments for deviations from a nominal position due to variations in the diameter of the substrate.

INPADOC Legal Status:

Gazette date	Code	Description (remarks) List all possible codes for TW
2006-03-01	MM4A -	Annulment or lapse of patent due to non-payment of fees
2002-06-10	GD4A +	Issue of patent certificate for granted invention patent

Buy Now: Family Legal Status Report

Family:

Buy PDF	Publication	Pub. Date	Filed	Title
	US6313596B1	2001-11-06		
	US6313596	2001-11-06	2000-11-10	Detection system for substrate clamp
	US6166509	2000-12-26	1999-07-07	Detection system for substrate clamp
	TW0473655B	2002-01-21	2000-07-06	DETECTION SYSTEM FOR SUBSTRATE CLAMP
	JP2001148411A2	2001-05-29	2000-07-07	SYSTEM FOR DETECTING CLAMP OF SUBSTRATE
5 family members shown above				

Other Abstract Info:

DERABS G2001-090498